4.1 iRSSunwanted

The following parameters should be changed in the simulation: (i) the interferer operates at 1000.3 MHz and (ii) outside the emission bandwidth, the attenuation is -23 dBc/200 kHz.

The corresponding power may derived using the known equation:

(Eq. 20)

$$\mathrm{P(dBm/Bref)} = \mathrm{Pe\,(dBm)} + \mathrm{Att(dBc/Bref)}$$

Then, in this example, outside the emission bandwidth (offset between –0.1 MHz and -1 MHz and between 0.1 MHz and 1 MHz), the power is equal to:

$$\mathrm{P} = 33 + (-23(\mathrm{dBc/Bref})) = 10(\mathrm{dBm/200kHz})$$

The complete unwanted emission mask is provided in the below figure.

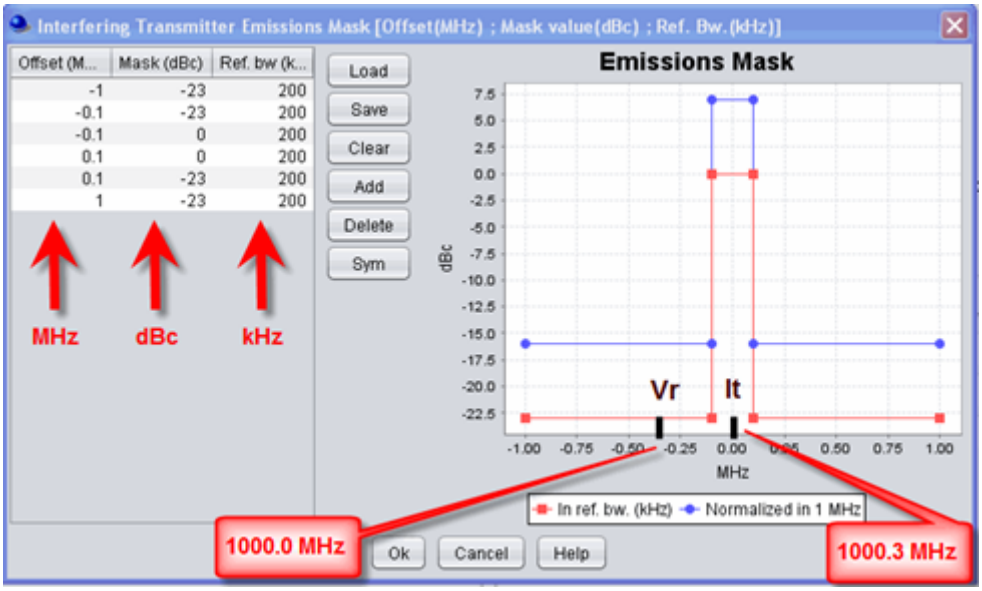


Figure 99: Unwanted emission mask

Using the previous assumptions, it is possible to derive the interfering power received by the Victim link receiver *within its bandwidth* as described in ANNEX 5: on page 274. This is called the iRSS $_{unwanted}$:

(Eq. 21)

$$\mathrm{iRSSunwanted} = -77.5\mathrm{dBm}$$

$$\mathrm{iRSSunwanted} = 10(\mathrm{dBm}/200\mathrm{kHz}) + 11 + 9 - (32.5 + 10\log(32) + 20\log(1000))$$

$$\mathrm{iRSSunwanted} = -77.5\mathrm{dBm}$$

This can be checked by running a simulation and displaying the iRSS$_{unwanted}$ signal as depicted in Figu

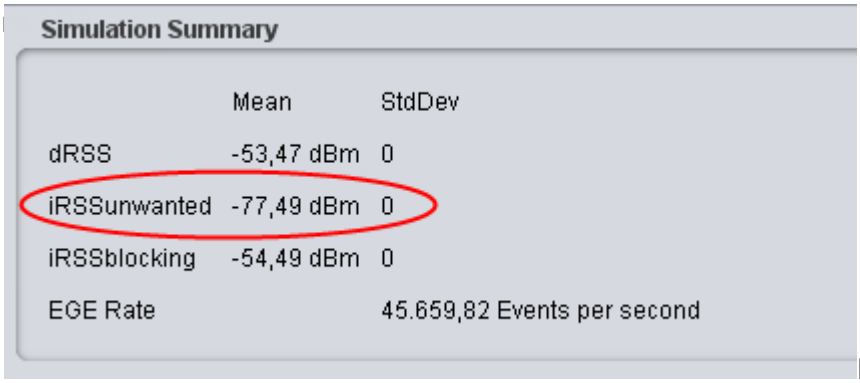
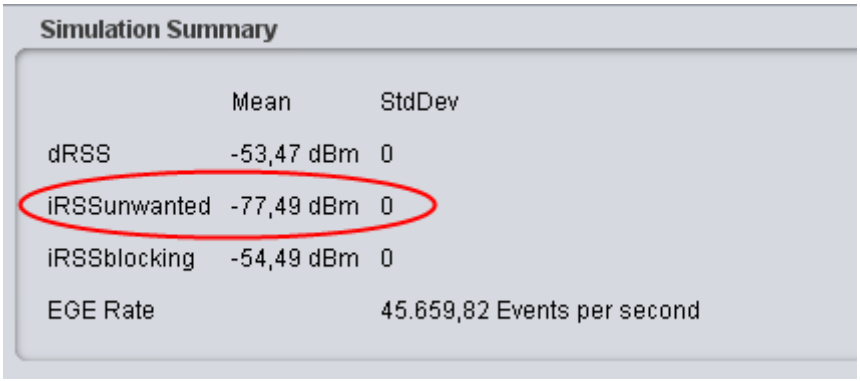


Figure 100: Mean iRSS$_{unwanted}$



In this example there is no bandwidth correction factor to be applied to the calculation of the iRSS$_{unwanted}$ since the VLR bandwidth and the ILT reference bandwidth have the

same value (i.e. 200 KHz).

Examples of correction bandwidth can be found in section 3.3.8

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